



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE
BOTANICAL GAZETTE

EDITORS :

JOHN M. COULTER, University of Chicago, Chicago, Ill.

CHARLES R. BARNES, University of Wisconsin, Madison, Wis.

J. C. ARTHUR, Purdue University, Lafayette, Ind.

VOLUME XXI

1896
MADISON, WISCONSIN
PUBLISHED BY THE UNIVERSITY OF CHICAGO

TRACY, GIBBS & CO.
PRINTERS AND PUBLISHERS
MADISON, WIS.

TABLE OF CONTENTS.

Notes on <i>Carex</i> , XVIII (with plate I)	<i>L. H. Bailey.</i>	1
A new Californian liverwort (with plate II)	<i>Douglas H. Campbell.</i>	9
Further criticism of Mr. Nash's "New or noteworthy American grasses"	<i>F. Lamson-Scribner.</i>	14
Notes on <i>Sporobolus</i>	<i>F. G. Smith.</i>	
The validity of Mr. Nash's changes	<i>Conway MacMillan.</i>	20
Some comments on Kerner and Oliver's "Natural His- tory of Plants"		
Noteworthy anatomical and physiological researches		26, 159, 229, 290, 371
Researches on transpiration and assimilation	<i>A. F. Woods.</i>	
On the twisting of the grain of pine	<i>L. S. Cheney.</i>	
The mechanics of curvature	<i>Rodney H. True.</i>	
Selection of organic food by plants	<i>Theo. Holm.</i>	
On the prevailing ombrophilous character of the fol- iage of tropical plants	<i>Chas. Chamberlain.</i>	
The embryo-sac of <i>Taraxacum</i>	<i>R. H. True.</i>	
Correlation effects following mechanical hindrance of growth		

Noteworthy anatomical and physiological researches
(continued).

Fertilization of <i>Batrachospermum</i>	J. M. C.	
Carbon dioxide and living protoplasm	R.	
The phenomena of disorganization	C. R. B.	
The physiology of tendrils	Rodney H. True.	
The physiology of <i>Drosera rotundifolia</i>	R. H. True.	
Researches on <i>Drosophyllum lusitanicum</i>		Rodney H. True.
The root-hairs of <i>Coniferæ</i>	R.	
New or peculiar aquatic fungi (with plates III and XXI–XXIII)	Roland Thaxter.	45, 317
Michael Schuck Bebb (with portrait, plate IV)		Walter Deane. 53
Notes on our <i>Hepaticæ</i> , IV	Lucien M. Underwood.	67
Flowers and insects, XV and XVI		Charles Robertson. 72, 266
The nomenclature question		82
Some inconsistencies in plant nomenclature		F. H. Knowlton.
Botanical nomenclature	G. E. Davenport.	
Some remarks on nomenclature	Otto Kuntze.	
Dates and references, and priority in nomenclature		Thomas Meehan.
Notes on cultures of <i>Exobasidia</i> (with plate VI)		Herbert M. Richards. 101
Development of the cystocarp of <i>Champia parvula</i> (with plates VII and VIII)	Bradley M. Davis.	109
Notes on the flora of Chicago and vicinity	E. J. Hill.	118
The embryo-sac of <i>Alisma Plantago</i> (with plates IX and X)	John H. Schaffner.	123
New North American grasses (with plates XI–XIII)		F. Lamson-Scribner. 133
Some aqueous media for preserving algæ for class material	W. A. Setchell and W. J. V. Osterhout.	140

The purposes of ethno-botany	<i>J. W. Harshberger.</i>	146
Notes on grasses	<i>George V. Nash.</i>	155
Notes on the North American species of <i>Plagiochila</i> (with plates xv and xvi)	<i>Alex. W. Evans.</i>	185
A simple freezing device (illustrated)	<i>W. J. V. Osterhout.</i>	195
Notes on some North American species of <i>Parmelia</i>	<i>Henry Willey.</i>	202
Remarks upon <i>Paleohillia</i> , a problematic fossil plant	<i>Theo. Holm.</i>	207
Notes from my herbarium, V	<i>Walter Deane.</i>	210
Notes on calcareous algæ from Michigan	<i>D. P. Penhallow.</i>	215
Notes on <i>Isoetes riparia</i> and <i>I. saccharata</i>	<i>T. Chalkley Palmer.</i>	218
On some species of the genus <i>Meliola</i>	<i>F. S. Earle.</i>	224
Filices Mexicanæ, VI (with plate XVIII)	<i>Geo. E. Davenport.</i>	253
<i>Aster tardiflorus</i> and its forms	<i>M. L. Fernald.</i>	275
The root-tubers of <i>Isopyrum occidentale</i> (illustrated)	<i>D. T. McDougal.</i>	280
Albert Nelson Prentiss (with portrait, plate XIX)	<i>Geo. F. Atkinson.</i>	283
Contribution to the life-history of <i>Sequoia sempervirens</i> (with plate XXIV)	<i>Walter Robert Shaw.</i>	332
Notes concerning the development of <i>Nemalion multifidum</i> (with plates XXV and XXVI)	<i>Grace D. Chester.</i>	340
Synopsis of North American <i>Amaranthaceæ</i> , V	<i>E. B. Uline and W. L. Bray.</i>	348
A study of some anatomical characters of N. Am. Gramineæ, VI (with plates XXVII and XXVIII)	<i>Theo. Holm.</i>	357
A synopsis of the American species of <i>Ctenium</i> (with plate XXIX)	<i>Fared G. Smith.</i>	361
The rate and mode of growth of banana leaves.	<i>Walter Maxwell.</i>	365

BRIEFER ARTICLES—

Distribution of prickly lettuce in the United States (with map) . . .	<i>Lyster H. Dewey.</i>	34
A curious coincidence	<i>Ralph E. Smith.</i>	35
Two species of Idaho plants	<i>John M. Holzinger.</i>	36
<i>Lasiodiplodia</i> , n. gen. (with plate v)	<i>Ida Clendenin.</i>	92
Accessory buds (with plate xiv)	<i>Geo. H. Shull.</i>	166
Relations of cutinized membranes to gases	<i>R. N. Day.</i>	169
<i>Hamamelis Virginiana</i>	<i>Bessie L. Putnam.</i>	170
Some new or rare plants	<i>Charles L. Pollard.</i>	233
Pebble mimicry in Philippine island beans	<i>W. H. Sherzer.</i>	235
Lichens, the only "thallophytes"	<i>A. P. Morgan.</i>	237
Bibliography of American botany	<i>Committee.</i>	238
Notes upon <i>Tradescantia</i> (with plate xx)	<i>J. N. Rose.</i>	301
A remarkable macrospore	<i>Chas. Chamberlain.</i>	374
<i>Aster tardiflorus</i> , a correction	<i>M. L. Fernald.</i>	374

EDITORIAL—

171, 303.

CURRENT LITERATURE—*For titles see Index under "Reviews."*

37, 93, 173, 239, 305, 375.

OPEN LETTERS—

Terminology of the inflorescence of grasses	<i>Geo. V. Nash.</i>	41
Mimicry of fungi in insects	<i>R.</i>	41
Is publication of botanical and zoological papers in microscopical journals justifiable?	<i>W. W. Rowlee.</i>	178
Nature of the binary name	<i>Edw. L. Greene.</i>	179
"Nature of the binary name," again	<i>L. H. Bailey.</i>	246

NOTES AND NEWS—

42, 97, 181, 247, 311, 380.

ERRATA.

- p. 13, line 6, for "dichotomous by" read dichotomously.
- p. 21, line 15, for first "of" read by.
- p. 21, line 14 from below, for "or" read and.
- p. 22, line 5 from below, for first "is" read functions as.
- p. 39, line 2 from below, for "Sandburg" read Sandberg,
- p. 66, line 2 from below, for "371" read 372.
- p. 92, line 19 for "patatoes" read potatoes.
- p. 125, line 13, for "controspheres" read centrospheres.
- p. 126, line 7, for "controsomes" read centrospheres.
- p. 133, line 8, for "4-6-" read 1-6-.
- p. 147, line 17, for "made useful" read put to some useful end.
- p. 147, line 8 from below, for "second" read third.
- p. 148, line 3, for "an" read a precarious.
- p. 148, *delete* last sentence in paragraph 2.
- p. 148, line 23, for "Cohobba" read Cohabba.
- p. 149, line 19, for "Hogan" read Logan.
- p. 150, line 5, for "Mancas" read Mancos.
- p. 161, line 10, for "he" read the.
- p. 206, line 6, for "*aurulenta*" read *amulentæ*.
- p. 241, line 8, add " at end.
- p. 278, line 18 from below, for "simply" read simple.
- p. 281, below figure insert explanation: Diagram of longitudinal section of root tuber of *Isopyrum occidentale*.—*a*, endodermis; *b*, proto-xylem; *c*, pericycle; *d*, xylem; *e*, medulla; *f*, sclerenchyma.

DATES OF PUBLICATION.

No. 1, January 16; No. 2, February 18; No. 3, March 28; No. 4, April 25;
No. 5, May 20; No. 6, June 17.